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ABSTRACT

The use and training of graduate teaching assistants (GTAs) in higher education was evaluated via questionnaires mailed nationwide to schools and departments offering graduate programs. Usable questionnaires were received from 164 of 323 graduate school deans and from 470 of 1,112 graduate school department chairs/heads. The graduate deans survey assessed demographic characteristics, the nature of campus-wide GTA training, evaluation of and satisfaction with GTA training, follow-up training and/or supervision and evaluations, GTA involvement in multi-section courses, types of GTA training desired, and evaluations of GTA teaching. The department chairs survey assessed departmental demographics, GTA selection, GTA teaching responsibilities, the nature of departmental training, evaluation of and satisfaction with training, follow-up training/supervision, evaluation of and satisfaction with GTA teaching, perceptions about ideal training programs, and problems that interfere with training. Findings show that, despite the seeming lack of a rigorous training and teaching evaluation program for GTAs, and despite the low number of students attending training programs, respondents seemed committed to the value of training and satisfied with the effectiveness of training and GTA teaching. Includes approximately 90 references. (JDD)

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"Graduate Teaching Assistant (GTA) Training: The View From the Top"

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Graduate Teaching Assistant (GTA) Training: The View From the Top

The use of graduate teaching assistants (GTAs or TAs) has been a significant part of higher education for some time. Eble (1987), in a presentation to the National Conference on the Training and Employment of Teaching Assistants in 1986, quoted from a recent manuscript purporting to research the history of the use of GTAs in academia: "Teaching assistantships began at Johns Hopkins in 1876. Students there took to moonlighting by 'lecturing to undergraduates,' and thus the TA system began--incidentally, so to speak, almost entirely out of economic necessity, scarcely touched by academic ideals, planning, contexts, or even thought, a condition that has existed pretty much down to today" (p. 7). Eble continued by reporting that, despite this rather random beginning, "after World War II, teaching assistantships were the major way of supporting graduate students and teaching basic undergraduate courses" (p. 8).

The use of GTAs in higher education seems to be a common occurrence in the 1980s and, probably, will remain so well into the next century. Endurance may not be the best criterion to use to evaluate this practice, however. In fact, the historical perspective just presented includes a rather strong indictment of the use of GTAs: Even now, their use is spurred by economic necessity and little else.

Certainly there are educators who would agree with this indictment. Eble, in the aforementioned speech, indicated his distaste for the current use of GTAs in strong terms: "I think the TA system is indefensible, like much in academia, and I think it will not be so much defended as kept in place. As for myself, I defend it as I defend other indefensible academic practices (grades, credit hours, lectures, research papers, word processors in faculty offices)--only to make it easier to subvert them and somewhat nullify their evil effects" (p. 9).

Clearly, arguments other than economic necessity have been made in support of the GTA system. Garland (1983) cited the releasing of faculty members from "the task of teaching beginning-level courses" (p. 488) as a bonus of their use. Jackson (1985) cited benefits to the faculty also: "The institution is able to reduce the instructional load on its regular faculty, releasing time for research and service activities" (p. 288). Jackson also described benefits to the GTA on a level other than financial: "The GTA is able to gain valuable teaching experience and has the opportunity to develop important interpersonal skills which will be useful regardless of the future career path" (p. 288). In addition, Jackson states many possible benefits to the students having a GTA as an instructor: GTAs generally are more accessible than regular faculty, are more empathic about students' problems

than regular faculty, may have an infectious enthusiasm for their profession that is indicative of new professionals, and, in the case of foreign student GTAs, provide an opportunity for students to expand their cultural horizons by interacting with someone from another culture.

While the economic benefits to the university and the graduate students are hard to dismiss, the additional benefits just described seem to soften the accusation that economics is "almost entirely" the basis for the use of GTAs to this day. However, what about the other indictments? The words "scarcely touched by academic ideals, planning, contexts, or even thought, a condition that has existed pretty much down to today" (Eble, 1987, p. 7) are harsh if they do represent the state of GTA use.

One area that might be directly affected by this purported lack of thought and planning is GTA training. Meiden (1970) stated that "it is certain that in order to assure good teaching by beginning instructors some system of training must be used. Without some guidance to the graduate student, ineffective teaching and, at times, chaos could result" (p. 168). Diamond and Gray (1987a) echo this sentiment in their recommendations to administrators in charge of GTA employment: "formal required training/orientation programs [should] be established for all graduate teaching assistants and ... elements of the program [should] be offered prior to the start of their teaching assignments" (p. 61). Many educators support this belief in the central role of training to achieving teaching effectiveness (e.g., Andrews, 1983; Chaichian, Macheski, Ewens, & Backus, 1986; Garland, 1983; Kaufman-Everett & Backlund, 1981; Staton-Spicer & Nyquist, 1979). Mauksch (1987) declared the value of teacher training for GTAs by claiming as myth the notion that effective teaching comes from innate talents rather than learned skills. He further likened a knowledgeable but untrained teacher to a violinist who masters the notes of a symphony without mastering the intricacies and nuances of the playing of the violin. Yet he maintained that "surveys of graduate curricula in several disciplines have shown that systematic learning experiences designed to prepare graduate students for teaching are very rare. They are scarce as discipline-based efforts and also as campus or college-wide programs" (p. 15).

If we look at quantity of available information written about GTA training, surely the previously-stated indictment about lack of thought and planning seems untrue. A number of publications from the last decade address a wide variety of issues relating to the training of GTAs: theoretical arguments for what should and should not be included in a GTA training program (e.g., J. D. W. Andrews, 1985; P. H. Andrews, 1983; Bailey, 1987; Davis, 1987; DeBoer, 1979; DiDonato, 1983; Jaros, 1987; Jossem, 1987; McGaghie & Mathis, 1977; Minkel, 1987; Rivers, 1983; Smith, 1972; Staton-Spicer & Nyquist, 1979; Stice, 1984; Trank, 1986; Wankat & Oreovicz, 1984); theoretical issues related to teaching and learning that can be applied to GTA training (e.g., Buckenmeyer, 1972; Daly & Korinek,

1980; Davey & Marion, 1987; Eble, 1981; Ervin & Muyskens, 1982; Feezel, 1974; Fraher, 1984; Franck & Samaniego, 1981; Lashbrook & Wheeless, 1978; Lynn, 1977; Newcombe & Allen, 1974; Scott & Wheeless, 1977; Van Kleeck & Daly, 1982); the relationship between GTA training and various outcome variables, such as student performance, observed teaching behavior, TA attitudes, and so on (e.g., Carroll, 1980; Sharp, 1981); benefits and drawbacks of campus-wide (e.g., Altman, 1987; Andrews, 1987; Fisch, 1987; Jackson, 1985, 1987; Jossem, 1987; Loeher, 1987; Nyquist & Wulff, 1987; Sharp, 1981) and departmental training programs (e.g., J. D. W. Andrews, 1987; P. H. Andrews, 1983; Donahue, 1980; Garland, 1983; Henke, 1987; Pons, 1987; Puccio, 1987; Stelzner, 1987; Strickland, 1987); and even a publication of readings from a TA national conference (Van Note Chism & Warner, 1987).

However, a closer look at the available literature may expose some of the negatives alluded to in the indictment of lack of thought and planning on the part of programs using GTAs, especially in the area of training and supervision. Many of the publications examined from the past decade presented personal experiences with one GTA training program (e.g., Altman, 1987; Donahue, 1980; Dykstra & Gelder, 1982; Ervin, 1981; Fulwiler & Schiff, 1980; Garland, 1983; Hardy, 1983; Henke, 1987; Humphreys, 1987; Jones & Liu, 1980; Krockover, 1980; LeBlanc, 1987; Lehr, 1983; Manteuffell & Von Blum, 1979; McCurdy & Brooks, 1979; Pons, 1987; Russo, 1982; Spooner & O'Donnell, 1987; Stelzner, 1987; White, 1981; Wright, 1987; Zimpher & Yessayan, 1987). Others discussed only one discipline or a few related disciplines (e.g., Goepper & Knorre, 1980; Hagiwara, 1979; Hellstrom, 1984; Henderson, 1985, 1986; Hennessy, 1986; Kaufman-Everett & Backlund, 1981; Lalande & Strasser, 1987; Nerenz, Herron, & Knop, 1979; Schultz, 1980; Stokely, 1987; Szymanski, 1978; Tirrell, 1985; Toliver, 1984; Trank, 1986). Still others examined only one university (e.g., Bray & Howard, 1980; Fernandez, 1986; Jackson, 1985, 1987; Taylor, 1987). Some of the available literature examined GTA training, at least in part, from a national perspective, but did so through a review of available literature rather than a systematic gathering/evaluation of current practices (e.g., Carroll, 1980; Clark & McLean, 1979; Parrett, 1987). Two notable exceptions to the above drawbacks are Jackson and Simpson's study (1983) and Diamond and Gray's study (1987a, 1987b).

The Jackson and Simpson (1983) study consisted of a national survey of graduate deans from many disciplines. However, this study was narrowly focused, since it included only the 59 institutions which had produced the largest number of PhDs in the previous 10 years, totally excluding the perceptions of deans who were concerned only with the training of Master's-level GTAs. The perceptions of the latter group of deans well may differ greatly from the population surveyed by Jackson and Simpson. In addition, while deans may be aware of departmental training programs, they

may lack the personal experience with those programs needed to provide much useful information concerning this type of GTA training.

The Diamond and Gray (1987a, 1987b) study consisted of a national survey of TAs from eight major research institutions. However, this study, too, was narrowly focused. While the TAs themselves well may provide some direct insights into the effectiveness of various types of training programs, the use of only eight major research institutions allows for only limited generalizations from these data to other populations. Furthermore, some of the results may be misleading, particularly those related to the nature and availability of campus-wide instruction, when only eight campuses are selected.

Finally, none of the literature reviewed documented prevailing ideas, evaluation procedures, and related GTA issues using a broad-based cross section of the GTA and/or administrative populations. While all of the literature mentioned previously is useful and adds to our body of knowledge in the area of GTA training, the lack of comprehensive literature, especially the lack of such literature that is current and based on broad and representative samples, may well be considered a weakness. Thought and planning should include as much information as possible, from as many sources as possible.

The pervasive use of GTAs and the desire for sound thought and planning behind their use well may mandate collection of data that provide a comprehensive overview of the state of GTA training nationwide. Such information would allow educators to gain new ideas, consider widely-used techniques, and generally compare and contrast their own programs (or lack thereof) with other programs. Furthermore, data gathered from people associated with the two major types of training programs, campus-wide and departmental, would allow for increased knowledge about the nature of and effectiveness of such programs for individuals interested in strengthening their own training programs. For those schools and/or departments which do not include training programs for their GTAs, such information may provide some data from which administrators and others involved with GTA teaching may reassess and evaluate their choices.

The research reported here focuses on many of the issues involved in GTA training, specifically from the viewpoint of people in administrative positions: graduate school deans and department chairs/heads. Graduate deans were considered the administrators most likely to have first-hand information about campus-wide training programs and department chairs/heads were considered to be administrators who should be knowledgeable about departmental programs. Further, since these people often are the ones in a position to allocate resources and follow through with recommendations for needed changes, the researchers felt it was important to gather their perceptions of training programs within their institutions and disciplines.

To allow comparisons between campus-wide and department-based training programs, five research questions related to GTA training were identified as the basis for this paper: 1) What training is provided to GTAs and what is the nature of that training? 2) How do administrators evaluate and how satisfied are they with that training? 3) What sorts of follow-up training and supervision are provided? 4) How do administrators evaluate that follow-up/supervision? and 5) How satisfied are administrators with GTA teaching overall?

Method

During the 1986-87 academic year, questionnaires were sent to schools and departments offering graduate programs nationwide. The general goal for the study was to solicit information and perceptions about GTA training from two types of administrators within graduate institutions: graduate deans and department chairs/heads.

Samples

Graduate school deans sample. The first goal of the research was to examine GTA training from the top of the graduate hierarchy: from the perspective of the head of the graduate school. In particular, the first study was designed to examine campus-wide training, where available, and to describe graduate school deans' perceptions about GTA training, both real and ideal.

To identify the graduate dean population, the researchers purchased a list of all graduate-degree-granting institutions in the United States from the Council on Graduate Studies in Washington, D. C. All 323 graduate deans on that list were contacted by mail and asked to participate in the study. In all, 240 graduate deans (74.3%) responded in some way to the survey mailing. Fourteen (4.3%) declined to complete the survey but sent copies of training materials used at their institutions to train GTAs. Forty-seven (14.6%) wrote to indicate that, although advanced degrees are awarded at their institutions, graduate students either do not teach or do not teach in sufficient numbers to warrant completion of the questionnaire. Three administrative assistants wrote to indicate that the person in question was "out of the country" and, therefore, could not respond to the questionnaire within the given time frame (0.9%). Twelve graduate deans (3.7%) wrote to indicate that they were too busy to complete the questionnaire. In total, 164 usable questionnaires were returned, for a final response rate of 50.8%.

Department chairs/heads sample. To adequately assess chairs/heads' perceptions of graduate student teacher training required a sample broad enough to cover a representative sample of graduate programs and deep enough to include a large number of departments that train GTAs. To meet both objectives required a purposive sample of graduate-degree-granting programs nationwide.

To provide breadth for the sample, all graduate degrees offered in the United States were identified from the listing provided in Peterson's Guide

to Graduate and Professional Programs (Moore, 1986). Code numbers were assigned to each degree listed, for a total of 163 different degrees. For each institution listed, three graduate degrees were randomly selected from the advanced degrees listed, thus creating a random sample by department designator. Whenever two degrees were randomly selected from what would logically appear to be the same department (i.e., secondary education and special education), another degree was selected so that the resulting sample would contain three academic departments from each school, not three advanced degrees. For schools with fewer than three departments offering advanced degrees, the department or departments listed were automatically selected for the sample.

Because the resultant random sample contained a significant proportion of esoteric departments that more than likely did not employ significant numbers of GTAs (e.g., pastoral ministry, taxation, demography and population studies, landscape architecture), there was concern that a strictly random sample could result in large numbers of unusable departments and too-few examples of departments that do train GTAs rigorously. To create depth for the sample, the researchers identified a common "core" of departments from the review of the literature and the results of the deans' survey which, in general, tended to meet three criteria: 1) they employed significant numbers of GTAs, thus enhancing the probability that something other than a one-on-one training program would be desirable; 2) they contained at least one or two departments among their ranks that have published articles on their GTA training program(s), suggesting some concern in the discipline for GTA training; and 3) they offered graduate degrees at one third or more of the institutions surveyed. These departments were the following: biology, chemistry, English, foreign languages, mathematics, physics, psychology, and sociology. For each institution in the sample, one of the above core departments was randomly added to the three departments selected earlier, for a total of between one and four departments selected from each school. In addition, to allow comparisons between speech communication departments and other academic disciplines at a later date, departments of speech communication were routinely added to the sample.

Selection designators were included in the identification numbers so that it would be possible to analyze the data using either the random or the purposive sample. Department designators were included in the identification numbers to allow comparisons between and within departments at a later date.

Postage-paid, return address envelopes were included with the questionnaires to enhance the response rate. In all, 1112 questionnaires were mailed to department chairs/heads. Of these, 470 questionnaires were returned (42.3%) and an additional 167 schools (15.0%) sent letters indicating that they do not employ GTAs, for an overall response rate of

57.3%. Of these responses, 339 of the selected departments indicated that they employ graduate students who teach. Despite the selective addition of the nine departments listed earlier, only six departments were proportionately overrepresented in the final sample: English, biology, chemistry, mathematics, and speech communication.[1]

Procedure

Questionnaires were mailed to graduate school deans during Fall Semester, 1986. The six-page, twenty-item questionnaire contained both open- and closed-ended questions and dealt with the following GTA training issues: 1) institutional demographics and limits on GTA teaching; 2) the nature of campus-wide GTA training provided, if any; 3) evaluation of and satisfaction with GTA training; 4) follow-up training/supervision procedures provided, if any; 5) evaluation of follow-up training/supervision; 6) scope of GTA involvement in multi-section courses on campus; 7) types of campus-wide training desired by deans, if none is currently available and 8) evaluations of GTA teaching. Graduate deans were asked to send copies of any campus-wide training materials created and/or utilized by their institutions as well as names of contact people at campus-wide training centers. Approximately twenty sets of such materials were returned.

To assess chairs/heads' perceptions, questionnaires were mailed to department chairs/heads during Winter Semester, 1987. The forty-six-item questionnaire contained both open- and closed-ended questions and dealt with eight major GTA training issues: 1) departmental demographics; 2) GTA selection; 3) GTA teaching responsibility; 4) nature of the training programs provided; 5) evaluation of and satisfaction with training; 6) GTA follow-up training/supervision; 7) evaluation of follow-up training/supervision; 8) satisfaction with GTA teaching; 9) perceptions about ideal training programs; and 10) problems that interfere with training. Respondents also were asked to send GTA handbooks, training course syllabi, evaluation forms, and other related materials so that training programs could be assessed in a more qualitative fashion at a later date. Over 100 departments included such material.

Results and Discussion

This paper presents the results from both surveys. The first section provides frequency data from the deans' questionnaire. The second section provides similar data from the department chairs/heads' questionnaire. The final section summarizes the results as they pertain to the five research questions identified earlier.

The Graduate Deans Survey

Demographic characteristics. Most of the schools included in the deans' sample (38.9%) enrolled between 10 and 20 thousand students, undergraduate and graduate students combined. Fewer than 10% of the

schools represented in the sample enrolled under 5 thousand students and over a fourth (26.7%) enrolled over 20 thousand at the time that these data were collected. Of these schools, 57% were described as being a combination research and teaching institution, 18% were primarily teaching institutions, 14% were primarily research institutions and 7% were described as a combination research, teaching and technical school. No purely technical institutions were represented in the sample.

When asked about institutional limits on courses GTAs can teach, just over half of the graduate deans (50.4%) indicated that no such restrictions apply. Although responses from the half that represented schools where graduate teaching is restricted varied somewhat, the most common restriction was "freshman-level courses only." Other restrictions included the following: "freshman and sophomore courses only," "courses in their major only," and "undergraduate courses only."

The nature of campus-wide GTA training. Just over one-fourth (27.5%) of the schools in the sample offered any sort of campus-wide training prior to Winter, 1987. The model "type" of training tended to be a one-day session prior to the beginning of the fall semester. Other sessions ran through all or part of the fall semester, with no sessions taking place during summer school. Time frames for these training sessions ranged from less than one day (12.0% of those schools offering training) to a full semester (0.3%), but most sessions were short. Only 12% of the schools offered a one-week or longer session, and over half (52.8%) indicated that they offered a one-day or shorter training session.

Administrators were cited as being in charge of campus-wide training in virtually all cases. Graduate deans (36.1%), directors of graduate studies (22.2%) and other university officials (47.2%) accounted for the majority of individuals in charge of GTA training (numbers add to more than 100% because respondents could list more than one person as being in charge of GTA training). Department chairs/heads (13.8%) and basic course directors (11.1%) accounted for the others involved in this training process.

Clearly, where campus-wide training did occur, staffing and load reassignment were issues handled outside of individual departments. Deans from only two schools indicated that load or course reassigned credit was provided for handling training responsibilities, presumably due to the large numbers of administrators involved. Most graduate deans indicated that training was incorporated into the job description for those individuals engaged in that process.

When asked whether campus-wide training, where available, was optional or mandatory, only 13% of the deans at schools that train indicated that attendance was required. Ninety-five percent of the deans indicated that they believed that half or fewer of the GTAs at their institutions actually attended the training sessions, with the range of this estimate being from 5% attendance to 99%. Recalling that campus-wide training was

available at only 25% of the institutions in the sample, these findings suggest that a nearly insignificant number of GTAs actually participate in campus-wide training (one half of 25%).

By far, the largest source of funding for campus-wide training was from the university general fund (44.4%). Money from the provost's office funded GTA training programs at 14% of the schools, money from the graduate dean's office provided support at 28% of the schools, and grants supplied funds in less than 1% of the schools surveyed. Other sources of funding included "donations from private sources," "state funds earmarked for GTA training," "special initiatives from the president's office" and "alumni contributions."

When asked about the content of campus-wide training programs, many consistencies emerged. Of seventeen topic areas identified on the questionnaire, the mode for "training breadth--the number of topics covered in the session" was seven, suggesting that most training sessions dealt with fewer than half of the topics listed. Topics covered, in descending order of frequency, were the following: exam writing (88.9%), building classroom climate and rapport (80.5%), creating interest in course content (72.2%), classroom management (69.4%), educational psychology (69.4%), grading course assignments (66.7%), course policies and procedures (61.1%), keeping a grade book (58.3%), lesson plan development (52.8%), providing constructive criticism (52.8%), campus-wide teaching requirements (52.8%), handling student-teacher conflicts (50.0%), ways to evaluate course/teacher effectiveness (44.4%), time management (36.1%), description of campus facilities/resources (33.3%), teaching strategies (lecture, discussion, etc.) (27.8%), and writing a syllabus (11.1%). No pattern is apparent in the list, with interpersonal issues liberally sprinkled among the administrative tasks. Presumably, writing a syllabus would be in last place due to the fact that GTAs often teach in structured courses for which the syllabus is prepared by a regular faculty member. Clearly, an assumption that GTAs must create their own exams underlies much of the instruction in such training programs.

The large number of topics covered in sessions that typically last a day or less is puzzling. It would appear that at least some of these institutions schedule multiple presentations simultaneously from which GTAs pick and choose. It would be impossible to cover seven of the previous topics in any depth on one day if each topic were handled separately.[2]

Graduate deans also were asked to indicate which of eight types of activities/learning experiences were included in their campus-wide training programs. Breadth of activities was bimodal, with the largest numbers of deans indicating that either two or four were used. Specific activities, listed in descending order of frequency, were as follows: critiqued assignments related to teaching, such as writing lesson plans, behavioral objectives, etc. (55.6%); group team-building activities (38.1%); practice

grading sessions (33.3%); experiential activities (25.9%); microteaching sessions (11.1%); videotaped microteaching sessions (11.1%); faculty/supervisor critiques of GTA presentations, microteaching sessions, etc. (8.3%) and tests over materials covered in the training sessions (4.3%).

Only five deans indicated that their institutions provided supplemental materials to GTAs for training purposes (texts, handbooks, etc.). All five of those deans named the same teaching textbook, Teaching Tips by McKeachie (1986), which was apparently provided at no charge to GTAs. Eleven deans indicated that they use audio-visual materials such as training videotapes and films to enhance training. Specific tapes/films were not listed in their responses. Twenty deans indicated that handbooks and other related materials were made available to GTAs at a minimal charge; examination of materials sent with the completed questionnaires suggested that these materials are developed inhouse by persons in charge of the campus-wide training. None of these materials appeared to be available commercially through a national publisher.

Evaluation of and satisfaction with GTA training. With regard to evaluating the training effectiveness, the majority of deans at schools that train indicated using an evaluation form completed by the GTAs (66.7%) and/or an evaluation form completed by students at the end of the semester (55.6%). Other evaluation strategies, in descending order of frequency, included the following: faculty observations of teaching (44.4%); basic course director observations of teaching (27.8%); GTA peer observations of teaching (13.9%); and academic performance of students in the classroom, such as test averages and final grades (5.6%).

When asked about their satisfaction with their school's campus-wide training, the largest number of the deans at schools that provide such training rated their satisfaction as "7" on a scale from 1 (not at all satisfied) to 9 (completely satisfied), but the mean for the scale was 5.2, suggesting that there were nearly as many satisfied deans as there were dissatisfied deans. The range for the scale was from 1 to 9, with one person checking each extreme.

Because it had been anticipated that few deans would have campus-wide programs on which to report, all respondents were asked to assess departmental GTA training at their institutions. Three-fourths of the deans indicated that one or more individual departments within their schools train GTAs. A surprising 13 % were not sure whether or not individual departments train. One third of the sample indicated that at least 50% of the departments employing GTAs at their schools provide some sort of GTA training. Thirteen percent indicated that 99 to 100% of departments that employ GTAs at their institutions train them for their teaching experience. Modal categories for this variable were 25% and 50%, and the mean for the scale was 40.2%.

Deans evaluated the degree to which they were satisfied with the

percentage of departments that train within their schools. The modal category was one (not at all satisfied) and over half rated their satisfaction as five or lower. Ten percent of the deans rated their satisfaction level at a perfect nine. The mean for this variable was 4.6, once again suggesting slight dissatisfaction with overall training.

The questionnaire also assessed perceptions about the quality of the training in specific departments/areas within the school: natural sciences, social sciences, education, arts and humanities, engineering and technical departments, business, physical education, and speech communication. Not surprisingly, the response rate dropped off dramatically for this set of questions, with only 40 to 60 of the deans venturing an evaluation for most departments.

Two departments/areas were rated at or above 6.0 on the 9-point satisfaction scale: arts and humanities (6.3) and physical education (6.0). Education and the natural sciences both received mean ratings of 5.6, while business and speech communication were rated at 5.3. Two departments/areas received ratings below 5.0: engineering and technical (4.4) and the social sciences (3.9). An open-ended question asked graduate deans to list three departments which, in their opinion, "provide the best training for GTAs." Most-frequently noted were English, departments in the natural sciences (chemistry, biology, physics), foreign languages, speech communication, and math. Most-frequently cited overall were English (with 48 mentions) and chemistry (with 22).

The final question on the survey asked graduate deans to rate their institution's preparation of GTAs for their teaching assignments as being "much better," "better," "about the same," "worse," or "much worse than other schools." Deans could also indicate that they had no basis for comparison. Only 4.6% of the respondents rated their school as "much better" than others at preparing GTAs to teach. About eleven percent (10.7%) rated their institutions as "better," over half (55.5%) indicated that their schools were "about the same" as other schools, eleven percent (11.4%) rated their schools as "worse" and under one percent (0.8%) indicated that their schools were "much worse" at preparing GTAs to teach. Nearly seventeen percent (16.8%) indicated that they had no basis for comparison.

Follow-up training and/or supervision. Only eleven deans (6.9%) indicated that their schools provide follow-up training and/or supervision following the initial training experience. Of those eleven, eight indicated that their GTAs attend inservice workshops, eight indicated that GTAs are evaluated by students, seven indicated that a supervisor is available to handle GTA problems/questions, and seven indicated that GTAs are evaluated by training and supervision personnel. Four noted that their GTAs attend training meetings during their teaching experience. All 11 indicated that the person(s) involved in that follow-up training and supervision was affiliated with a training center, not with a department, in the school.

When asked about types of teaching improvement resources (videotapes, programmed instruction, teaching library, etc.) available to GTAs at their institutions, seven of the deans indicated that GTAs have access to a teaching library, six indicated availability of videotaped resources, three described programmed instruction modules, and one indicated that instructional staff are available for departmental retreats and workshops.

Evaluations of follow-up training/supervision. Graduate deans were not generous with their praise for their institution's follow-up training/supervision. On a scale of 1 (not at all satisfied) to 9 (completely satisfied), the modal score for satisfaction was 5 and the mean for the scale fell at 3.9. The questionnaire did not ask for detailed descriptions of this follow-up, but some deans did write in comments to help clarify their responses. These written comments included the following: "Supervision merely means that someone is staffing a phone;" "We offer workshops throughout the year, but these tend to attract only a portion of the GTAs we have teaching for us;" and "We have an active instructional staff who are available to answer questions, videotape classes and provide critiques, and generally provide whatever service is required."

GTA involvement in multi-section courses. When asked to list the multi-section classes taught by GTAs at their institutions, 82 (or 50%) of the respondents indicated that no such courses are taught on their campuses. Of the other half, the majority (51% of those responding) indicated that English offers multi-section courses taught by graduate assistants. Other departments mentioned with notable frequency were the following: biology, chemistry, foreign languages, physics, psychology, sociology and speech communication.

Types of GTA training desired. Graduate deans at institutions where campus-wide training was not available were asked to indicate their attitudes toward GTA training in general and the types of content that they would like to see provided eventually. When asked to rate the importance of teacher training for new GTAs "in general," the resultant mean was 7.5 on a 9-point scale (1 = not at all important; 9 = essential), indicating that the majority of deans felt that such training was nearly essential. When asked to rate the importance of campus-wide training and campus-wide follow-up, the means dropped to 5.4 and 5.0, respectively. Deans were much more in favor of department-based training. When asked to rate the importance of department teacher training using the same 9-point scale, the mean score was 7.6, again nearly essential. As for the importance of departmental follow-up, the mean was 7.1.

For those deans who did not have campus-wide training at their institutions, three areas of possible instruction seemed most critical: mandatory inclass visitations during the first semester of teaching (44.3%), mandatory lectures on instructional techniques (29.0%), and mandatory

teacher education workshops that include laboratory situations (26.7%). Other areas receiving some support were the following: mandatory paid team-teaching with a regular faculty member before being assigned a section to teach alone (22.1%), optional lectures on instructional techniques (22.1%), optional teacher education workshops that include laboratory situations (21.4%), an optional teacher education course (13.7%), a mandatory teacher education course (11.5%), and a mandatory unpaid team-teaching experience with a regular faculty member (5.3%).

Given a list of possible content areas that might be taught in a training workshop or course, deans were asked to check those areas that they would like to see included in a program at their institution. Six content areas were indicated by roughly half of the deans at schools not currently offering training: teaching strategies (56.5%), grading course assignments (54.2%), providing constructive criticism (50.4%), building classroom climate and rapport (48.9%), writing exams (48.9%) and handling student-teacher conflicts (48.1%). Other areas selected, in descending order of frequency, were the following: classroom management (43.5%), ways to evaluate course/teacher effectiveness (42.0%), course policies and procedures (41.2%), creating interest in course content (40.5%), lesson plan development (36.6%), time management (36.3%), writing a syllabus (35.9%), description of campus resources/facilities (26.0%), keeping a grade book (25.2%), educational psychology (13.0%), and campus-wide teaching requirements (11.5%).

The above list bears little resemblance to the list presented earlier of content areas actually covered in campus-wide training. Because deans at schools where training was available did not respond to this question, it is not possible to assess whether or not those deans perceived certain topics as more appropriate than those actually being covered at their institutions (although, given that so many of the people in charge of training were the graduate deans themselves, that possibility does not seem likely). Nevertheless, it is interesting that some of the topics frequently covered on campuses offering training (e.g., educational psychology, creating interest in course content, course policies and procedures, keeping a grade book, and campus-wide teaching requirements) were seen as less desirable by deans on campuses where training is not offered than some of the topics infrequently covered (e.g., teaching strategies and writing a syllabus).

Given a similar list of activities/learning experiences that might be used to teach the above content, graduate deans once again indicated those that they would like to see included in a training program at their institution. Only one item was checked by half or more of the respondents: faculty/supervisor critiques of GTA presentations, microteaching sessions, etc. (55.7%). Other items selected, in descending order, were the following: videotaped microteaching sessions (48.1%), microteaching sessions (36.6%), critiqued assignments related to teaching such as writing lesson plans,

behavioral objectives, etc. (32.1%), practice grading sessions (26.0%), experiential activities such as exercises, roleplaying, etc. (25.2%), group team-building activities (13.7%), and tests over content presented during a training session or sessions (13.7%). Again, there is a noticeable difference between what deans on campuses where training is not offered would like to see and what is actually used on campuses offering training programs. For example, although faculty critiques topped the list of desirable activities, that activity was reported near the bottom of the list of actual practices, with only 8% of the schools in the sample including that activity in their training. Likewise, microteaching was evaluated highly by deans at schools that did not train but was included in actual training sessions only 11% of the time. Conversely, group team-building, which was cited as an activity used at 38% of schools that provided training, was cited as desirable by only 14% of the deans at schools that did not train.

Evaluations of GTA teaching. The entire sample of graduate deans also was asked to evaluate, on the 9-point satisfaction scale, their satisfaction with GTA teaching ability in the departments/areas mentioned earlier. Five areas were rated at 6.0 or above: business (6.6), arts and humanities (6.6), speech communication (6.5), physical education (6.4), and the natural sciences (6.4). Two areas received mean ratings between 5.0 and 5.9: social sciences (5.6) and education (5.5). Somewhat oddly, in light of the generally favorable ratings, the engineering/technical area received a mean rating of only 3.9.

The Chairs/Heads Survey

Departmental demographics. Looking first at the demographic characteristics of departments contained in the purposive sample of department chairs/heads, it would appear that a broad range of types of department structures were represented. The range for the number of full-time, tenure-track faculty in these departments was from 1 to 75, with the mean being 20.8 faculty members. The mode for this variable was 18. These departments enrolled between 2 and 459 graduate students, for a mean size of 68.6 and a modal number of 45. Of these graduate students, between 1 and 119 were employed as teaching assistants, for a mean number of 23.0 and a mode of 3. One hundred forty-nine of these departments employed only Master's students; 80 employed only doctoral students. The remaining 110 departments employed both Master's and doctoral candidates as GTAs. The mean number of Master's students employed as GTAs was 8.3; the mean for doctoral students was 10.5. Only 10 respondents reported hiring students who were pursuing other advanced degrees as GTAs, and 42 indicated that they hire graduate students from outside of the department to teach on assistantships. Nearly half of the chairs/heads (47.5%) indicated that they hire no experienced GTAs; the remaining half indicated hiring roughly 3.6 experienced GTAs to teach in their departments each year. About 30% (28.7%) of the chairs/heads indicated that none of the GTAs teaching at

that time had taught for more than one year in the department; the remaining 70% indicated that between 1 and 91 of their GTAs had been teaching more than one year, with the mean number being 9.1.

GTA selection. When asked which of a list of criteria were used to evaluate graduate students for a teaching assistantship, chairs/heads indicated that the most-used criteria were GPA (86.6%) and recommendations (87.8%). Least-used were completion of a graduate teaching course (15.5%) and prior teaching experience (33.7%). Other criteria used were the following, in descending order of frequency: consistency with general requirements for graduate school entry (62.4%), GRE or other graduate entry exam scores (55.5%), phone or personal interview (41.5%), and reputation of school at which they earned their undergraduate degrees (32.2%).

Chairs/heads indicated that most of the actual selection of GTAs is handled by a selection committee (50.4%). Although used least of all the choices supplied, another group that makes decisions about selecting graduate teaching assistants is the department as a whole (13.4%). Additionally, the following people have a role in the selection of graduate teaching assistants, whether as part of a committee decision, department decision or individual decision: the department chair/head (48.4%), the director of graduate studies for the department (40.6%), and the basic course director or course supervisor (21.8%).

GTA teaching responsibilities. Graduate teaching assignments seemed to be varied and often extensive. According to the department administrators in this sample, GTA teaching accounted for between 5% and 95% of the student credit hours generated in the departments surveyed. The modal response for this question was 0%, with 88 (26.1%) chairs indicating that GTAs do not teach their own courses. For those departments in which GTAs handle teaching responsibilities on their own, the mean percentage for student credit hour (SCH) generation was 22.4% or about one-fourth of the total SCHs generated by the departmental offerings. The size of the courses taught ranged from 7 to 1800 students, with the largest number of sections enrolling 25 students. Most courses taught by GTAs (38.1%) were self-contained, autonomous sections with a standardized syllabus. Self-contained, totally autonomous sections taught by GTAs accounted for another 28.0% of courses, and mass lecture with GTA-taught lab sections accounted for about one-fourth (23.2%) of GTA-taught courses. Three additional formats made up 3.4% each: sections team-taught by a faculty member and a GTA, courses taught by faculty with GTA graders/recordkeepers, and "other" formats which did not fit into the categories specified by the researchers on the questionnaire. Write-in examples included the following: "I prepare teaching materials such as overheads and videotapes," "I do purely administrative stuff such as taking roll and handing back papers," and "I teach the mass lecture and other GTAs

assist."

Over half of the department chairs/heads (51.3%) indicated that GTAs teach more than one course in their departments; in those departments where three or more different courses are taught by GTAs, the same pattern of involvement described earlier was evident, with the largest number of sections being taught autonomously by GTAs with or without a common syllabus.

The nature of departmental training. Because departmental training was the major focus for the chairs/heads' survey, numerous questions were asked to assess the state-of-the-art of department-based training. Of the 339 departments in the sample, about half (55.8%) offered some form of training for their GTAs. The largest number of those training programs (30) had been in place for 10 years and only 10% of them had been in place for over 10 years, suggesting that 90% of the programs available were fairly young, given the long history of GTA use described earlier.

Considerable diversity was reported with regard to length and time frame of the training sessions, with most (84%) taking up one week of time prior to the beginning of school. Some were as short as 2 or 3 hours (8.9%); others lasted for the entire fall semester (2.7%). Most sessions were the responsibility of department chairs or basic course directors/supervisors (76.3%) who received some reassigned time (usually one course per semester) for this responsibility (29.1%). About half of the departments chairs indicated that departmental training was mandatory (53.1%). For those departments in which training was optional, chairs/heads were asked to estimate actual GTA participation. The range for this variable was from 50% to 100%, with the mean at 80% participation.

Five content areas were most-cited as being part of the departmental training programs: grading/critiquing assignments (51.0%), course policies and procedures (47.5%), classroom management (44.5%), classroom climate and rapport (44.2%), and teaching strategies (44.2%). Other content areas covered included writing and grading exams (38.5%), handling student-teacher conflicts (37.0%), lesson plan development (34.3%), creating interest in course content (32.2%), and time management (25.1%).

A variety of strategies were indicated as being included in departmental training programs, with the most-cited (47.6%) being faculty or supervisor critiques of GTA work (microteaching, lesson plans, etc.). About equally-mentioned were the following four: experiential activities such as exercises, simulations, role-playing, etc. (24.8%), practice grading/critiquing sessions (23.6%), microteaching sessions (22.7%), and group team-building activities (17.6%).

About one-third (32.5%) of the department administrators indicated that they provide supplementary materials to GTAs for training purposes, with most citing a departmental training handbook and/or copies of Teaching Tips by McKeachie (1986). Twenty percent (19.1%) indicated that they use

audio-visual materials in their training programs. Tapes cited tended to be specific to disciplines, such as the "Encounters with Teaching" tape produced by the University of Washington for speech communication instructors.

Evaluation of and satisfaction with training. Three strategies were most often used for evaluation of training effectiveness: evaluation forms completed by students at the end of the semester (42.1%), faculty observations of teaching (36.1%), and basic course director observations of teaching (33.7%). Other methods for evaluating effectiveness included the following: an evaluation form completed by the GTAs (19.4%), academic performance of students in the classroom such as test averages, final grades, etc. (14.0%), and GTA peer observations of teaching (13.7%). Fewer than three percent (2.7%) of the chairs/heads indicated that GTAs were tested over the material presented in the training session as a way to assess training effectiveness.

As was done with the deans, department administrators were asked to evaluate their departments' training programs on a 9-point satisfaction scale (1 = not at all satisfied; 9 = completely satisfied). The range of responses was from 1 to 9, with the mode falling at 7 and the mean at 6.3. Chairs/heads were also asked to estimate the satisfaction level of departmental faculty ($\bar{X}$ = 6.7) and the GTAs ($\bar{X}$ = 6.1), indicating overall satisfaction with GTA training.

When asked to rate their departments' preparation of GTAs for teaching compared with other departments in their fields nationwide, chairs/heads tended to rate their departments as being "about the same" (38.2%). Only 6% rated themselves as "somewhat better" or "much better" and 33% rated themselves as "somewhat worse" or "much worse." Twenty-two percent indicated having no basis for comparison.

Finally, when asked to rate their departments' preparation of GTAs for teaching in comparison with other departments at their institutions, 3% indicated that their preparation was "somewhat better" or "much better" and 51% rated their preparation as "somewhat worse" or "much worse." Twenty percent declined to respond, leaving 26% who felt that their preparation was "about the same" as other departments.

Follow-up training/supervision. Of equal interest was the nature of the follow-up training and/or supervision provided to GTAs, if any. Departmental administrators were asked to indicate what sorts of activities make up GTA follow-up/supervision from a list of six items provided on the questionnaire. By far the most-cited option was that a faculty member or basic course director supervises GTA teaching (69.9%). Other responses were as follows: a faculty member or basic course director has reassigned time to deal with GTA teaching problems, concerns, etc. (29.6%), an experienced GTA supervises (15.8%), the department chair supervises GTA teaching and deals with teaching problems (13.7%), an

experienced GTA has reassigned time to deal with GTA problems, etc. (6.6%), and someone outside of the department supervises GTA teaching (1.8%). Given the overwhelming gap between the use of faculty supervision and any other choice, designation of a person as being in charge of GTA teaching would seem to have been the method of choice.

Activities in that teaching follow-up or supervision included the following, in descending order of frequency: GTAs attend regularly-scheduled staff meetings (48.4%), inservice workshops are provided (20.9%), teaching award competitions are held (18.5%), GTAs take a training course each semester that they have a teaching assignment (13.1%), GTAs are expected to read a daily printed source of information such as a bulletin board, notebook, etc. (10.4%), and day or weekend "retreats" are taken to discuss problems and/or enhance skills (4.2%). Again, it would appear that regular meetings with the faculty supervisor in a group session was the method of choice.

Evaluation of and satisfaction with GTA teaching. Departmental administrators also were asked to indicate which strategies are used to evaluate GTA classroom teaching from a list provided. Three strategies were most cited: student evaluations are examined and compared with department means/standards (71.9%), faculty member(s) make classroom visits (49.0%), and the basic course director makes classroom visits (46.0%). Other evaluation strategies included the following: students' performances on standardized tests are compared across sections (12.2%), evaluation takes place only if complaints are brought to the attention of the chair or supervisor (6.0%), and GTA classes are videotaped and evaluated by a faculty member or members or course supervisor (5.4%). Twenty-six departmental administrators (7.8%) indicated that there was no standard evaluation process.

When asked to evaluate satisfaction with GTA teaching in the department, administrators were generally quite favorable. The range for this variable was 1-9, but the mean and mode both fell at 7.0, which is quite positive. Chairs/heads also evaluated their perceptions of how satisfied other faculty in the department were with GTA teaching ability. The mean for these estimates was 6.8, with a range from 1 to 9. Ten percent declined to answer that question. When asked about student satisfaction, the mean was again from 1 to 9 with 8% missing data. The mean for this variable was 6.6. Finally, chairs/heads were asked to assess how satisfied they perceived the GTAs themselves to be with their teaching ability. Again the range was from 1 to 9 with about 10% of the respondents not venturing a guess. The mean for this variable was 6.8. Overall, then, chairs/heads were generally quite satisfied with GTA teaching ability and felt that faculty, students, and the GTAs themselves also were satisfied.

Perceptions about ideal training programs. Several questions on the survey instrument were designed to assess chairs/heads' perceptions

about what GTA training should entail. Considerable difference of opinion was presented.

When asked to rate the importance of campus-wide training, chairs/heads rated that format at only a mean of 4.3 on a 9-point scale, suggesting fairly strong dislike for the campus-wide approach. As for department-based training, the mean for that variable was 7.1, suggesting much stronger support for the departmental training.

To assess perceptions about what training should entail, chairs/heads were asked which of a list of six teaching training strategies and resources they would like to see available to their GTAs. Highest-rated was inservice training, with 69% of respondents indicating that they would like to see that resource available. Forty-six percent indicated that they would like to see both distribution campus-wide of teaching materials such as teaching handbooks and/or textbooks and availability of audio-visual materials on teaching. Development of a campus-wide training institute was supported by 38% of the sample and campus-wide training programs were supported by 31%, despite the earlier low evaluation of the importance of campus-wide training. Availability of training materials on their specific subjects received support from 24% of the respondents.

Problems that interfere with training. Finally, chairs/heads were asked to indicate, from a list of nine possible problems, which ones made it difficult for them to prepare GTAs to teach. Only one problem was reported by over half (53.7%) of the respondents: not enough financial support from the institution. Others, in descending order, were the following: lack of faculty interested in taking responsibility for training (41.5%); a tendency for GTAs to view teaching as a source of income, not a job commitment (23.3%); a tendency for faculty to place priority for GTA performance on research, not teaching (21.8%); a prevailing attitude that teaching improves with practice, not training (20.9%); lack of training materials available (14.9%); unwillingness among faculty to spend department funds on training (10.7%); lack of control over GTA performance such as no way to fire or otherwise sanction GTAs (6.3%); and difficulty of course content GTAs are expected to teach (6.0%). Other problems provided under the "other" category included the wide range of abilities, interests, and prior teaching experiences among any group of new GTAs; practical problems involved in asking GTAs to be on campus for training prior to the beginning of the fall session; lack of FTE to staff training programs; lack of individuals with the appropriate background for training GTAs; and general apathy about teaching in the department.

The Five Research Questions

As described earlier, five research questions provided the framework for these analyses: 1) What training is provided to GTAs and what is the nature of that training? 2) How do administrators evaluate and how satisfied are they with that training? 3) What sorts of follow-up training

and supervision are provided? 4) How do administrators evaluate that follow-up/supervision? and 5) How satisfied are administrators with GTA teaching overall? The answers cover a broad territory.

Training does seem to be a part of many programs. About half of the departments in the sample reported departmental training programs and about one-fourth of the institutions in the sample offered some sort of campus-wide training. While this information shows that training is being used to prepare GTAs, clearly the opposite is equally or even more true: at least half of the GTAs do not receive training for their role as a university teacher. As for the nature of the training, clear differences between campus-wide and departmental programs were described.

Certainly, time was one critical variable. Departmental training programs were generally described as devoting more time to their training programs than were campus-wide programs. The typical department used one week of training prior to teaching and the typical campus-wide training program consisted of a one-day session prior to teaching. Again, such restricted time spans devoted to the important task of training GTAs for their teaching roles seems barely adequate, if that.

The potential effectiveness of the short time span devoted to training was further reduced by the large number of topics reportedly covered in the training programs. (Topics covered in campus-wide and departmental programs are listed in Table 1.) Over half of the deans indicated twelve topics as being included in campus-wide training programs: exam writing, building classroom climate and rapport, creating interest in course content, classroom management, educational psychology, grading course assignments, course policies and procedures, keeping a grade book, lesson plan development, providing constructive criticism, campus-wide teaching requirements, and handling student-teacher conflicts. All of these topics were covered and yet the typical campus-wide training program consisted of a one-day session. "Covered" well may be an appropriate word choice to use in conjunction with the included topics for campus-wide training, because indepth discussion would be impossible in such a short time frame.

The departmental training programs varied considerably in what was included in their training programs. (See Table 1.) Only one topic, grading/critiquing assignments, was cited by over half of the chairs/heads. Four other topics cited often were course policies and procedures, classroom management, classroom climate and rapport, and teaching strategies. Either the departmental training programs included fewer topics than the campus-wide programs, despite the longer average timeframe for the departmental programs, or there was less congruence concerning what topics should be covered in departmental programs. This latter explanation seems most accurate, because the specialized needs of each discipline well may account for a wide disparity of topics covered in such a specific training program.

Comparing among the topics covered in campus-wide and departmental sessions with topics seen as desirable by deans, there are few similarities. Apparently, there was considerable diversity of opinion between deans at schools that do not train and those at schools that do offer training but fairly high consistency in terms of topics actually covered in the campus-wide programs surveyed. Perhaps there is some linkage among schools that offer training? Do the people in charge of these programs know each other? Do they belong to some network that allows them to share ideas, thus maximizing the similarities among their programs?

Table 2 presents a similar three-way comparison among training activities used and considered as desirable for GTA training. Once again, there are significant differences between campus-wide and departmental activities. The biggest difference is in the area of faculty or other supervisor critiques of GTA teaching. Although used in nearly half of the departmental programs, this activity was included in under 10% of the campus-wide programs. Similarly, about one-fourth of the departmental programs included microteaching sessions, with only 11% of the campus-wide programs using this technique. Group team-building was cited by 38% of the deans but only 18% of the department chairs/heads. Interestingly, there is a closer correspondence between the list of activities considered desirable by graduate deans and the list of activities used in departmental programs than there is between the real and ideal deans lists. Apparently other considerations enter into programming than merely what is considered desirable, especially on a campus-wide basis. Although seen as a desirable activity by deans at schools that don't train, supervisor observations of GTA teaching may be impractical, if not financially impossible, on a campus-wide basis. The smaller number of GTAs involved may allow departments to handle this activity, however. Similarly, microteaching may be seen by deans as valuable but it may be physically and/or financially impractical to offer this experience to an entire campus of GTAs.

As for evaluation of these programs, the responses were, once again, varied. Deans were divided on this issue, with some expressing very high and others expressing very low satisfaction with their institutions' campus-wide training of GTAs for their teaching responsibilities. When asked to evaluate department-based training within certain disciplines, the graduate deans seemed more satisfied with some departments than with others.

Chairs/heads expressed relatively high satisfaction with GTA teacher preparation overall. Furthermore, they generalized their high satisfaction to other faculty, students, and the GTAs themselves.

Evaluating the training effectiveness seems to have been done without any direct observation from a supervisor. Campus-wide programs relied heavily on evaluation forms completed by the GTAs and/or the students.

This fact is especially interesting to note since "mandatory inclass visitations during the first semester of teaching" was the area most-cited by deans as being most critical for inclusion in a GTA program. Even in the departmental training programs, evaluation forms completed by the students was the most-cited training evaluation procedure. Faculty and/or basic course director observations were cited by only 36.1% or fewer of the respondents.

Follow-up training and supervision appears to have been the responsibility of a small group of individuals, generally department chairs/heads and basic course directors. In institutions with campus-wide training, supervision was reported to be largely lacking. On the department level, some supervision took the form of observations by the course supervisor, but the main evaluation procedure was still student evaluations of GTA teaching. Interestingly, departmental administrators indicated that almost 70% of the programs were supervised by a faculty member or a basic course director. However, only 49% of the administrators indicated classroom observations as a means of supervision. Apparently, most of the evaluation procedures used to assess the effectiveness of the training and even the actual teaching of a largely-used segment of the overall teaching staff was feedback from students. This situation hardly seems to document a strong commitment to the teaching effectiveness of GTAs.

In spite of the range for satisfaction with various aspects of GTA training and/or supervision, deans and chairs/heads were surprisingly solid in their evaluations of GTA teaching. Apparently, whether trained or not, GTAs were perceived as being better-than-adequate teachers, which is a curious finding.

Implications

The results reported in this paper provide a comprehensive picture of the state-of-the-art of GTA training nationally from the perspective of university administrators. Many disconcerting conclusions can be drawn from an analysis of the data reported.

GTAs are being used as a major source of staffing in college and university classrooms. In many cases, they are the sole person responsible for the classes that they are assigned to teach. Furthermore, it appears that there are only minor limitations on the type of classes that they can teach. Most of the GTAs are Master's students, very few of which are experienced teachers when they begin their assistantships.

Despite the seeming lack of a rigorous training and teaching evaluation program for GTAs, and despite the low number of students attending training programs, respondents in this study seem committed to the value of training and satisfied with the effectiveness of training and GTA teaching. The deans reported that training was nearly essential for new GTAs. Campus-wide, the deans rated their typical satisfaction with training at just above average. Departmentally, the chairs/heads indicated an

above-average satisfaction level with training and felt that the other faculty members and the GTAs also were above-average in their satisfaction with the GTA training. The same was true for the reported satisfaction levels of overall GTA teaching in the departments.

The breadth of GTA teaching possibilities and the inexperience of these GTAs would seem to mandate GTA training. In fact, the administrators in this sample tended to support this mandate in principle but not in practice. More astonishing, administrators tended to be quite satisfied with GTA teaching even in schools and departments where training was not offered. How is that possible?

Could it be that GTAs don't need training in order to be effective teachers, even though logical arguments for the need for training abound and the administrators themselves seem to support the need for training? Perhaps administrators are happy because they have lower standards for GTAs than they have for regular faculty or the are not convinced that GTA teaching would improve with more rigorous training? Perhaps we are witnessing dissonance reduction or selective perception in action: knowing that the funding and support is not available for strengthening GTA training, administrators choose to select only information that suggests that the status quo works? Clearly, the gap is wide between the real and the ideal.

The question also remains whether it is better to train campus-wide or within individual departments. Logic suggests that a combination of both might be the ideal. Campus-wide training sessions can deal with the broad strokes of teaching: teaching strategies, teaching philosophies, communication issues and other topics that generalize across disciplines. Departments can build on that framework by dealing with methodologies and content specific to the individual GTAs' assigned course(s). Isn't it likely that the GTAs would benefit from exposure to both the macro and micro view of teaching at their colleges and universities?

The nagging question remains, however: Does GTA training make a difference? The data presented in this paper were collected to describe the state-of-the art of what is happening in GTA training; they do not and cannot address the question of whether or not training makes a difference. Maybe GTA training doesn't make a difference--at least not in perceptions. Maybe training makes a difference but the dissonance created by having to justify why a school or department does not train is sufficient to nullify that effect--at least on paper.

These data seem to suggest that the time has come to take a long, hard look at GTA teaching effectiveness as perceived by students enrolled in GTA classrooms. The time also has come to identify other variables that contribute to perceptions of GTA teaching effectiveness. Training is almost certainly one such variable. Are the others of equal or greater importance?

Educators must face the evidence that the use of GTAs at graduate-degree-granting institutions is a way of life and will be for some

time to come. The widespread use of GTAs makes their effectiveness a concern to departments and universities utilizing them in the classroom. In addition, the importance of the GTA role is magnified by the fact that it may be the only teaching experience a graduate student has prior to becoming an assistant professor in a tenure-track position.

Hopefully, information like that provided in this paper will be helpful to administrators at colleges and universities as they engage in the continuing dialogue about GTA training and other support programs. As Jennings, the President of Ohio State University, stated, "A university cannot achieve excellence, cannot use all of its human resources well, without attending to the issues inherent in the employment and education of its teaching assistants" (1987, p. 5).

References

Altman, H. B. (1987). TA training at the University of Louisville: Creating a climate. In N. Van Note Chism & S. B. Warner (Eds.), Employment and education of teaching assistants (pp. 174-176). Ohio State University, Columbus, OH: Center for Teaching Excellence.

Andrews, J. D. W. (Ed.). (1985). Strengthening the teaching assistant faculty. New Directions for Teaching and Learning, No. 22, San Francisco: Jossey-Bass.

Andrews, J. D. W. (1987). Department-based and centralized TA training programs. In N. Van Note Chism & S. B. Warner (Eds.), Employment and education of teaching assistants (pp. 109-110). Ohio State University, Columbus, OH: Center for Teaching Excellence.

Andrews, P. H. (1983). Creating a supportive climate for teacher growth: Developing graduate students as teachers. Communication Quarterly, 31(4), 259-265.

Bailey, J. G. (1987). TA handbooks: What should they include? In N. Van Note Chism & S. B. Warner (Eds.), Employment and education of teaching assistants (pp. 136-139). Ohio State University, Columbus, OH: Center for Teaching Excellence.

Bray, J. H., & Howard, G. S. (1980). Methodological considerations in the evaluation of a teacher-training program. Journal of Educational Psychology, 72(1), 62-70.

Buckenmeyer, J. A. (1972). Preparing graduate assistants to teach. Improving College and University Teaching, 20(2), 142-144.

Carroll, G. (1980). Effects of training programs for university teaching assistants: A review of empirical research. The Journal of Higher Education, 51(2), 167-183.

Chalchian, M., Macheski, G., Ewens, W., & Backus, N. (1986). Getting people started: Teaching assistant workshop for sociology graduate students at Michigan State University. Teaching Sociology, 14, 168-175.

Clark, J. D., & McLean, K. (1979). Teacher training for teaching assistants. The American Biology Teacher, 41, 140-144, 187.

Daly, J. A., & Korinek, J. T. (1980). Instructional communication theory and research: An overview of classroom interaction. In D. Nimmo (Ed.), Communication Yearbook 4 (pp. 515-532). New Brunswick, N.J.: Transaction Books.

Davey, K. B., & Marion, C. (1987). Evaluating TA development programs: Problems, issues, strategies. In N. Van Note Chism & S. B. Warner (Eds.), Employment and education of teaching assistants (pp. 118-125). Ohio State University, Columbus, OH: Center for Teaching Excellence.

Davis, W. E. (1987). TA training: Professional development for future faculty. In N. Van Note Chism & S. B. Warner (Eds.), Employment and education of teaching assistants (pp. 129-131). Ohio State University,

Columbus, OH: Center for Teaching Excellence.

DeBoer, K. B. (1979). Teacher preparation for graduate assistants. Communication Education, 38, 328-331.

Diamond, R. M., & Gray, P. J. (1987a). National study of teaching assistants. Syracuse University, Syracuse, NY: The Center for Instructional Development.

Diamond, R. M., & Gray, P. J. (1987b). A national study of teaching assistants. In N. Van Note Chism & S. B. Warner (Eds.), Employment and education of teaching assistants (pp. 80-82). Ohio State University, Columbus, OH: Center for Teaching Excellence.

DiDonato, R. (1983). TA training and supervision: A checklist for an effective program. Association for the Departments of Foreign Languages Bulletin, 15(1), 34-36.

Donahue, F. E. (1980). A Texas model for TA training. Die Unterrichtspraxis: For the Teaching of German, 13, 141-149.

Dykstra, D. I., Jr., & Gelder, J. I. (1982). Cross-disciplinary course in teaching for GTAs. Journal of College Science Teaching, 11, 347-350.

Eble, K. E. (1981). The craft of teaching: A guide to mastering the professor's art. San Francisco: Jossey-Bass.

Eble, K. (1987). Defending the indefensible. In N. Van Note Chism & S. B. Warner (Eds.), Employment and education of teaching assistants (pp. 7-13). Ohio State University, Columbus, OH: Center for Teaching Excellence.

Ervin, G. L. (1981). A training program for new TA's in Russian. Russian Language Journal, 35(121-122), 27-33.

Ervin, G., & Muyskens, J. A. (1982). On training TAs: Do we know what they want and need? Foreign Language Annals, 15(5), 335-344.

Feezel, J. D. (1974). Implications of speech communication research. In P. J. Newcombe and R. R. Allen (Eds.), New horizons for teacher education in speech communication (pp. 51-64). Skokie, IL: National Textbook Co.

Fernandez, C. (1986). Training of graduate teaching assistants: A case study. Paper presented at the Regional Conference on University Teaching, Las Cruces, NM.

Fisch, L. (1987). An alternative to a big-deal TA training program: Cooperative departmental efforts on shoestring budgets. In N. Van Note Chism & S. B. Warner (Eds.), Employment and education of teaching assistants (pp. 155-157). Ohio State University, Columbus, OH: Center for Teaching Excellence.

Fraher, R. (1984). Learning a new art: Suggestions for beginning teachers. In M. M. Gullette (Ed.), The art and craft of teaching, (pp. 116-127). Cambridge, MA: Harvard University Press.

Franck, M. R., & Samaniego, F. A. (1981). The supervision of teaching assistants: A new use of videotape. Modern Language Journal, 65, 273-280.

Fulwiler, T. E., & Schiff, P. M. (1980). MSU graduate students become MTU writing teachers. Improving College and University Teaching, 28(1), 7-9.

Garland, T. N. (1983). A training program for graduate teaching assistants: The experiences of one department. Teaching Sociology, 10(4), 487-503.

Goepper, J. B., & Knorre, M. (1980). Pre- and in-service training of graduate teaching assistants. Modern Language Journal, 64, 446-450.

Hagiwara, M. P. (1979). Leadership in foreign language education: Trends in training and supervision of graduate assistants. New York: MLA Materials Center.

Hardy, R. J. (1983). The role of graduate teaching assistants in a large American government class. Teaching Political Science, 10(3), 136-140.

Hellstrom, W. (1984). Economics, elitism, and teacher apprentice programs. ADE Bulletin, 77, 26-32.

Henderson, I. (1985). Training teaching assistants in the yearlong methods course. ADFL Bulletin, 16(2), 49-52.

Henderson, I. (1986). The role of graduate teaching assistants in CAI: Perspective on a pilot program. Die Unterrichtspraxis, 15(2), 206-212.

Henke, J. (1987). Policies for graduate assistants in the English graduate program at Youngstown State University. In N. Van Note Chism & S. B. Warner (Eds.), Employment and education of teaching assistants (pp. 234-238). Ohio State University, Columbus, OH: Center for Teaching Excellence.

Hennessy, M. (1986). Theory before practice in the training of writing teachers. Paper presented at the annual meeting of the Conference on College Composition and Communication, New Orleans, LA.

Humphreys, W. L. (1987). The TA seminar and TA support services at the University of Tennessee, Knoxville. In N. Van Note Chism & S. B. Warner (Eds.), Employment and education of teaching assistants (pp. 171-173). Ohio State University, Columbus, OH: Center for Teaching Excellence.

Jackson, W. K. (1985). Improved GTA delivered instruction. College Student Journal, 19, 288-293.

Jackson, W. K. (1987). Support services for graduate teaching associates at the University of Georgia. In N. Van Note Chism & S. B. Warner (Eds.), Employment and education of teaching assistants (pp. 158-159). Ohio State University, Columbus, OH: Center for Teaching Excellence.

Jackson, W. K., & Simpson, R. D. (1983). A survey of graduate teaching assistant instructional improvement programs. College Student Journal, 17, 220-224.

Jaros, D. (1987). The teaching assistant and the university. In N. Van Note Chism & S. B. Warner (Eds.), Employment and education of teaching assistants (pp. 369-371). Ohio State University, Columbus, OH: Center

for Teaching Excellence.

Jennings, E. H. (1987). The central role of the teaching assistant in higher education. In N. Van Note Chism & S. B. Warner (Eds.), Employment and education of teaching assistants (pp. 4-6). Ohio State University, Columbus, OH: Center for Teaching Excellence.

Jones, L. L., & Liu, C. F. (1980). What the TA needs, as determined from TA requests. Journal of Chemical Education, 57, 356.

Jossem, E. L. (1987). TA pedagogical preparation: Should a general or discipline-specific approach be used? In N. Van Note Chism & S. B. Warner (Eds.), Employment and education of teaching assistants (pp. 111-114). Ohio State University, Columbus, OH: Center for Teaching Excellence.

Kaufman-Everett, I. N., & Backlund, P. M. (1981). A study of training programs for graduate teaching assistants. Association for Communication Administration Bulletin, 38, 49-52.

Krockover, G. H. (1980). A model to improve science instruction by graduate teaching assistants. School Science and Mathematics, 80(4), 343-347.

Lalande, J. F. II, & Strasser, G. F. (1987). A survey of international teaching assistants in foreign language departments. In N. Van Note Chism & S. B. Warner (Eds.), Employment and education of teaching assistants (pp. 251-262). Ohio State University, Columbus, OH: Center for Teaching Excellence.

Lashbrook, V. J., & Wheeless, L. R. (1978). Instructional communication theory and research: An overview of the relationship between learning theory and instructional communication. In B. D. Ruben (Ed.), Communication Yearbook 2 (pp. 439-456). New Brunswick, N.J.: Transaction Books.

LeBlanc, L. B. (1987). Training for language teachers: A model program. College Teaching, 35, 19-21.

Lehr, F. (1983). ERIC/RCS Report: Teaching teachers to teach writing. English Education, 15(1), 53-57.

Loeher, L. L. (1987). Factors in locating a program within the university organization. In N. Van Note Chism & S. B. Warner (Eds.), Employment and education of teaching assistants (pp. 104-108). Ohio State University, Columbus, OH: Center for Teaching Excellence.

Lynn, E. M. (1977). In-Service teacher education in classroom communication. Communication Education, 26, 1-12.

Manteuffel, M. A., & Von Blum, R. (1979). A model for training biology teaching assistants. The American Biology Teacher, 41, 476-479, 491.

Mauksch, H. O. (1987). The context of preparing teaching assistants. In N. Van Note Chism & S. B. Warner (Eds.), Employment and education of teaching assistants (pp. 14-18). Ohio State University, Columbus, OH: Center for Teaching Excellence.

McCurdy, D. W., & Brooks, D. W. (1979). Project TEACH to teach teaching assistants. Journal of College Science Teaching, 8(4), 233-234.

McGaghie, W. C., & Mathis, C. (1977). Preparing graduate students for college teaching: Rationale and methods. Improving College and University Teaching, 25(4), 220-221, 224.

McKeachie, W. J. (1986). Teaching tips (8th ed.). Lexington, MA: D. C. Heath and Company.

Meiden, W. (1970). Training the inexperienced graduate assistant for language teaching. Modern Language Journal, 54, 168-174.

Minkel, C. W. (1987). The formulation of university policy for graduate assistantship administration. In N. Van Note Chism & S. B. Warner (Eds.), Employment and education of teaching assistants (pp. 35-37). Ohio State University, Columbus, OH: Center for Teaching Excellence.

Moore, T. C. (Ed.). (1986). Peterson's guide to graduate and professional programs. Princeton, NJ: Peterson's Guides.

Nerenz, A. G., Herron, A. C., & Knop, C. K. (1979). The training of graduate teaching assistants in foreign languages: A review of literature and description of contemporary programs. The French Review, 52(6), 873-889.

Newcombe, P. J., & Allen, R. R. (Eds.). (1974). New horizons for teacher education in speech communication. Skokie, IL: National Textbook Co.

Nyquist, J. D., & Wulff, D. (1987). The training of graduate teaching assistants at the University of Washington. In N. Van Note Chism & S. B. Warner (Eds.), Employment and education of teaching assistants (pp. 144-154). Ohio State University, Columbus, OH: Center for Teaching Excellence.

Parrett, J. L. (1987). A ten-year review of TA training programs: Trends, patterns, and common practices. In N. Van Note Chism & S. B. Warner (Eds.), Employment and education of teaching assistants (pp. 67-79). Ohio State University, Columbus, OH: Center for Teaching Excellence.

Pons, C. R. (1987). A three-phase approach to TA training: The program for associate instructors in French at Indiana University. In N. Van Note Chism & S. B. Warner (Eds.), Employment and education of teaching assistants (pp. 239-243). Ohio State University, Columbus, OH: Center for Teaching Excellence.

Pucchio, P. (1987). TAs help TAs: Peer counseling and mentoring. In N. Van Note Chism & S. B. Warner (Eds.), Employment and education of teaching assistants (pp. 219-223). Ohio State University, Columbus, OH: Center for Teaching Excellence.

Rivers, W. M. (1983). Preparing college and university instructors for a lifetime of teaching: A luxury or a necessity? Association of the Departments of Foreign Languages Bulletin, 15(2), 23-29.

Russo, G. M. (1982). Training for TAs. Extending Communication: Methods for Teaching Modern Languages, 30(4), 171-174.

Schultz, R. A. (1980). TA training, supervision, and evaluation: A report of a survey. Association of the Department of Foreign Languages Bulletin, 12(1), 1-8.

Scott, M. D., & Wheeless, L. R. (1977). Instructional communication theory and research: An overview. In B. D. Ruben (Ed.), Communication Yearbook 1 (pp. 495-512). New Brunswick, NJ: Transaction Books.

Sharp, G. (1981). Acquisition of lecturing skills by university teaching assistant: Some effects of interest, topic relevance, and viewing a model videotape. American Educational Research Journal, 18, 491-502.

Smith, A. B. (1972). A model program for training teaching assistants. Improving College and University Teaching, 22(1), 198-200.

Spooner, M., & O'Donnell, H. (1987). ERIC/RCS report: From cheap labor to junior colleague: Training TAs in composition. English Education, 19(2), 122-126.

Staton-Spicer, A. Q., & Nyquist, J. L. (1979). Teaching effectiveness of graduate teaching assistants. Communication Education, 28, 199-205.

Stelzner, S. L. (1987). Peer training in a teaching improvement program for TAs. In N. Van Note Chism & S. B. Warner (Eds.), Employment and education of teaching assistants (pp. 208-214). Ohio State University, Columbus, OH: Center for Teaching Excellence.

Stice, J. E. (1984). A model for teaching new teachers how to teach. Engineering Education, 75, 83-87.

Stokely, L. (1987). Turning specialists into professors: The preparation of graduate students for college teaching. Paper presented at the annual meeting of the Association for the Study of Higher Education, Baltimore, MD.

Strickland, K. S. (1987). Planning and facilitating a group workshop. In N. Van Note Chism & S. B. Warner (Eds.), Employment and education of teaching assistants (pp. 215-218). Ohio State University, Columbus, OH: Center for Teaching Excellence.

Szymanski, J. R. (1978). Training the foreign language teaching assistant. Improving College and University Teaching, 26(1), 71-73.

Taylor, S. (1987). The student instructor program at Brigham Young University. In N. Van Note Chism & S. B. Warner (Eds.), Employment and education of teaching assistants (pp. 230-233). Ohio State University, Columbus, OH: Center for Teaching Excellence.

Tirrell, M. K. (1985). Teaching assistants as teachers and writers: Developmental issues in TA training. Paper presented at the annual meeting of the Conference on College Composition and Communication, Minneapolis, MN.

Toliver, S. S. (1984). Proficiency-based instruction and teaching assistant supervision. Die Unterrichtspraxis, 17(2), 299-306.

Trank, D. (1986). A professional development program for graduate instructors in communication and composition. Paper presented at the

annual meeting of the Speech Communication Association, Chicago, Il.

Van Kleeck, A., & Daly, J. A. (1982). Instructional communication research and theory: Communication development and instructional communication--An overview. In M. Burgoon (Ed.), Communication Yearbook 5 (pp. 685-715). New Brunswick, N.J.: Transaction Books.

Van Note Chism, N., & Warner, S. B. (Eds.). (1987). Employment and education of teaching assistants. Ohio State University, Columbus, OH: Center for Teaching Excellence.

Wankat, P. C., & Oreovicz, F. S. (1984). Teaching prospective faculty members about teaching: A graduate engineering course. Engineering Education, 75, 84-85.

White, E. J. (1981). Project TEACH supplemented. Journal of Chemical Education, 58, 766-768.

Wright, D. L. (1987). A seminar on college teaching. In N. Van Note Chism & S. B. Warner (Eds.), Employment and education of teaching assistants (pp. 177-179). Ohio State University, Columbus, OH: Center for Teaching Excellence.

Zimpher, N. L., & Yessayan, S. (1987). An overview of an orientation program for graduate teaching associates at The Ohio State University. In N. Van Note Chism & S. B. Warner (Eds.), Employment and education of teaching assistants (pp. 160-166). Ohio State University, Columbus, OH: Center for Teaching Excellence.

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Footnotes

[1]We say that these five departments were "overrepresented" because 17 or more departments in each of those fields were contained in the final sample (range 17 to 69). The largest number of any other department represented in the sample was 5.

[2]This assumption is documented in another paper to be presented at this conference (authors: Mary Bort, University of Nebraska and Nancy L. Buerkel-Rothfuss, Central Michigan University). In this paper, a large number of programs are described as providing a "smorgasbord" of sessions from which GTAs select those that they feel would be most beneficial to their teaching assignments.

TABLE 1: Comparison among topics covered in campus-wide and departmental training programs with topics identified as desirable by deans where campus-wide training is not available

GRADUATE SCHOOL DEANS		DEPARTMENT CHAIRS/HEADS
Topics Covered	**Desirable Topics**	**Topics Covered**
exam-writing (89%)	teaching strategies (56%)	grading/critiquing (51%)
climate/rapport (80%)	grading (54%)	policies and procedures (48%)
creating interest (72%)	constructive criticism (50%)	classroom management (44%)
classroom management (69%)	climate/rapport (49%)	climate/rapport (44%)
educational psych (69%)	writing exams (49%)	teaching strategies (44%)
grading (67%)	student-teacher conflict (48%)	writing/grading exams (38%)
policies and procedures (61%)	classroom management (44%)	student-teacher conflict (37%)
keeping grade book (58%)	ways to evaluate (42%)	lesson plan development (34%)
lesson plan development (53%)	policies and procedures (41%)	creating interest (32%)
constructive criticism (53%)	creating interest (40%)	time management (25%)
campus-wide req. (53%)	lesson plan development (37%)	
student-teacher conflict (50%)	writing a syllabus (36%)	
ways to evaluate (44%)	time management (36%)	
time management (36%)	campus resources/facilities (26%)	
campus res./facilities (33%)	keeping a grade book (25%)	
teaching strategies (28%)	educational psychology (13%)	
writing a syllabus (11%)	campus-wide teaching requirements (12%)	

TABLE 2: Comparison among training activities used in campus-wide and departmental training programs with activities identified as desirable by deans where campus-wide training is not available

GRADUATE SCHOOL DEANS		DEPARTMENT CHAIRS/HEADS
Activities Covered	**Desirable Activities**	**Activities Covered**
critiqued assignments (56%)	fac./sup. critique (56%)	fac./supervisor critique (48%)
team-building (38%)	videotaped microtchng. (48%)	experiential activities (25%)
practice grading (33%)	microteaching (37%)	practice grading (24%)
experiential activities (26%)	critiqued assignments (32%)	microteaching (23%)
microteaching (11%)	practice grading (26%)	team-building (18%)
videotaped microtchng. (11%)	experiential activities (25%)	
fac./supervisor critiques (8%)	team-building (14%)	
tests over material (4%)	tests over materials (14%)	